

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated May 3, 2006. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1-17 are under consideration in this application. Claims 1, 6, 10 and 13-14 are being amended, as set forth above and in the attached marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicants' invention.

All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejections

Under 35 U.S.C. §103, claims 1-4, 6-8 and 10-16 were rejected as being unpatentable over U.S. Patent No. 5,721,940 to Luther et al. (hereinafter "Luther"), in view of U.S. Patent No. 5,991,469 to Johnson et al. (hereinafter "Johnson"), and rejected claims 5, 9 and 17 were rejected as being unpatentable over Luther, in view of Johnson and U.S. Patent No. 6,695,204 to Stinson et al. (hereinafter "Stinson"). These rejections have been carefully considered, but are most respectfully traversed.

The computer-implemented (including computer managers, computer terminals, databases and a network shown in Fig. 1) form processing system of the invention (for example, the embodiment depicted in Fig. 1), as now recited in claim 1, comprises: a management system 203 of form identification dictionary including a manager 111 of form identification dictionary for creating and managing a form identification dictionary 112 for identifying a type of a printed form (e.g., the bill shown in Fig. 3; "*ruled lines/frames printed on the form*" paragraph [0005] of the corresponding US Pub. No. 2002/0065847); and a plurality of form processing terminals 121, each of said form processing terminals 121 having a form identification dictionary 122 for identifying the type of the form, and identifying the

form to process the form. The management system 111 of form identification dictionary and said plurality of form processing terminals 121 are interconnected via a network 101. The form processing terminal 121, upon occurrence of failure in identification of the form based on said form identification dictionary 122 of said form processing terminal 121 itself, transmits image information of the form to said management system 111 of form identification dictionary. In particular, said management system 111 of form identification dictionary, when the form type of said image information of the form transmitted from said form processing terminal 121 has *not* yet been registered in said form identification dictionary 112 of said manager 111 of form identification dictionary (“*When the decision in step 502 results in that the form type of the inputted form image is not registered in the master of form identification dictionary 112*” [0053]), creates information for identifying the type of the not-yet-registered form (“*As the form identification information, ... for example, such information as the size or dimension of form sheet, information about ruled lines/frames printed on the form, character strings representing the title of the form, etc.*” [0005]), stores the created information in said form identification dictionary 112 of said manager 111 of form identification dictionary, and transmits the created information to said form processing terminal 121.

The last paragraphs of other independent claims (claim 6 reciting the management system of claim 1, claim 10 reciting the form processing terminal of claim 1, and claim 13 recited a method implemented by the form processing system of claim 1) all recite a similar feature.

In essence, when the terminal/system fails to identify the type of the printed form, i.e., a new printed form, it adds the new printed form into the form identification dictionary 112 or revises/updates an existing form. The invention changes the form identification information (to be used to identify form types) to cope with a vast number of kinds of new formats and printed forms. The identification dictionary is a dictionary containing information used for identification of form types, e.g., Figs. 3-4. It contains information for identifying the type of the form, such as the size or dimension of form sheet, information about ruled lines/frames printed on the form, character strings representing the title of the form, etc. ([0005]), but not any elements to be filled in by individual users and would be different with each of the printed forms of the same type, such as “ICHIRO SUZUKI” (the actual name) or “AUG. 1999” (what might be called the content). It is this information for identifying the type of the form that is the object of “**updating**” in the dictionary stored in

both the management system 111 and the form processing terminal 121.

Applicants respectfully contend that none of the cited prior art references teaches or suggests “when said image information of the printed form transmitted from said form processing terminal has **NOT** yet been registered in said printed form identification dictionary, **creating information for identifying the form type of the not-yet-registered (new) printed form**, storing the created information in said form identification dictionary, and transmitting the created information to said form processing terminal” as in the invention.

In contrast, Luther merely extracts “dissimilar **data**” (col. 9, line 22) filled in the pre-designated fields/blanks of an **existing** form in the form dictionary which is identified as the same/base form as completed/filled-up, rather than “updating the form dictionary with a new/dissimilar **form**”. Luther simply does not “**create information for identifying a form type of a not-yet-registered (new) printed form**, store the created information in said form identification dictionary, and transmit the created information to said form processing terminal” as the present invention.

As described in Luther’s SUMMARY OF THE INVENTION, “*a completed printed form is scanned and a hierarchical profile for the completed form is created. The completed form profile is compared with each of plural blank form profiles in a form dictionary until the completed form is identified as one of the blank forms in the dictionary. Upon identifying the completed form, the completed form profile and the blank form profile are compared and, based on the comparison, dissimilar image data from the completed form profile is extracted and stored for display to an operator. Because only dissimilar data is displayed to an operator, the operator can more easily recognize what data is to be keyed-in. If desired, field identifiers may also be displayed (col. 2, lines 32-45)” via the steps of “*identifying a stored blank form profile as that of the completed form profile based on the results of comparison, comparing the blank form profile with the completed form profile and extracting dissimilar data from the completed form profile, storing the extracted dissimilar data, and reassembling the completed form by displaying the identified blank form and overlaying the dissimilar data at the appropriate locations within the form (col. 2, lines 51-58)”*.”*

“*For example, in FIG. 10b, there is illustrated a completed form which includes, among other items, invoice number, origin and destination information, quantity information, and description information. Because these data fields were predestinated during the preproduction definition stage, data within each field is extracted from the completed form. Accordingly, in order to remove all extraneous items from the form, the form is input into the*

data entry and retrieval system and, in accordance with the present invention, only the desired information is displayed to the data entry operator for manual-key input. As a result, a data entry operator can reduce the amount of time in reviewing a completed form for useful data (col. 8, lines 8-20)".

If a match has NOT been determined between the completed form and any forms in the form dictionary, Luther merely alerts the data entry operator that a completed form cannot be identified and the completed form is either manually identified by the data entry operator or the completed form is routed for further processing, such as optical character recognition executed by CPU 10 (Steps 1206-1207 in Fig. 12; Col. 8, lines 45-51). Luther does NOT "create information for identifying a form type for the not-yet-registered/new printed form." As such, Luther neither "store such created information in said form identification dictionary", nor transmit such created information to said form processing terminal", as does the invention.

Contrary to the Examiner's assertion (p. 5, lines 1-2 of the outstanding Office Action) that Luther stored the profile of a created form in form memory, Applicants respectfully contend that Luther only stores "*the extracted dissimilar data with respective header information in form memory* (col. 9, lines 24-26)". As discussed, Luther's extracted dissimilar data is data filled in the pre-designated fields/blanks of an **existing** form in the form dictionary which is identified as the same/base form as completed/filled-up, rather than any "created information for identifying a form type for the **not-yet-registered/new** printed form" as the present invention.

Johnson was relied upon by the Examiner to teach a plurality of workstations connected via a network. However, Johnson fails to compensate for Luther's deficiencies.

Stinson was relied upon by the Examiner to teach transmitting the created information to said form processing terminal. However, Stinson's check cashing unit only accepts existing check forms, but not accepting any new check form such that it does not create any "information for identifying a form type of the not-yet-registered/new printed form (such as a size or dimensions of a form sheet and information of ruled lines/frames printed on the form)".

Applicants contend that neither Luther, Johnson, Stinson, nor their combination teaches or discloses each and every feature of the present invention as disclosed in independent claims 1, 6, 10 and 13. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The

withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

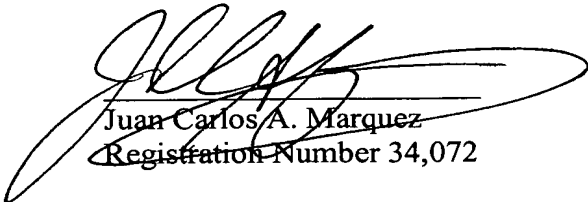
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

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